

REMARKS

Claims 1-10, 28 and 29 are withdrawn. Claims 21-22 and 25-27 remain pending for consideration in the present application. In the office action of January 2, 2004, Claims 21-22 and 25-27 were rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 5,997,622 (hereinafter "Weber") as evidenced by U.S. Pat. No. 5,605,750 (hereinafter "Romano").

REJECTIONS OF CLAIMS UNDER 35 U.S.C. 102

In the previous response by the Applicant, an attempt was made to clearly outline the current status of the law regarding anticipation with respect to large lists of potential chemical moieties. The Applicant strongly encourages the Examiner to carefully review this discussion of the case law on this point, since it appears that the law has not been correctly applied.

Summary of Pertinent Case Law

The law clearly indicates that in order to hold a reference as anticipating under section 102(b), the reference must disclose each and every element of the claimed invention. However, it is also established case law that not every reference which seems to disclose a claimed invention is a proper reference under §102. This is often true with respect to inventions involving chemical compounds.

Specifically, the court has stated that "the true test of any prior art relied on to show or suggest that a chemical compound is old, is whether the prior art is such as to place the disclosed 'compound' in the possession of the public." *In re Brown*, 51 C.C.P.A. 1254, 1259 (CCPA 1964). Further, a non-enabled reference *cannot* serve as the basis for a rejection under 35 U.S.C. §102. On this point, section 2121.01 of the MPEP states:

In determining that quantum of prior art disclosure which is necessary to declare an applicant's invention 'not novel' or 'anticipated' within section 102, the stated test is whether a reference contains an 'enabling disclosure'... ." *In re Hoeksema*, 399 F.2d 269, 158 U.S.P.Q. 596 (CCPA 1968). A reference contains an "enabling disclosure" if the public was in possession of the claimed invention before the date of invention. "Such possession is effected if one of ordinary skill in the art could have combined the publication's description of the invention with his [or her] own knowledge to make the claimed invention." *In re Donohue*, 766 F.2d 531, 226 U.S.P.Q. 619 (Fed. Cir. 1985).

Importantly, it is well established that a mere recitation of a long list of chemical moieties for use in a general genus, does not constitute an enablement of each of the possible chemical structures. Specifically, the Federal Circuit has stated:

Clearly, however, just because a moiety is listed as one possible choice for one position does not mean there is *ipsis verbis* support for every species or sub-genus that chooses that moiety. Were this the case, a "laundry list" disclosure of every possible moiety for every possible position would constitute a written description of every species in the genus. ***This cannot be*** because such a disclosure would not "reasonably lead" those skilled in the art to any particular species. *Fujikawa v. Wattanasin*, 93 F.3d 1559, 1571, 39 U.S.P.Q.2d 1895 (Fed. Cir. 1996) (emphasis added).

This case involved a markedly similar situation as found in the present invention. In fact, in Fujikawa, a generalized genus was identified using a generic structure having substituents groups R0, R1, R2, R3, R4 and R5. The specification identified several broad categories of suitable groups and then identified a number of preferred groups. *Id.* at 1570. Essentially, the court held that such a "laundry list" was insufficient to provide an enabling disclosure for specific compounds which were assembled by picking and choosing various R groups.

In an earlier case, the CCPA provided an appropriate analogy in chemical cases such as the present invention. The court analogized a genus and corresponding species to a forest and its trees.

It is an old custom in the woods to mark trails by making blaze marks on the trees. It is no help in finding a trail . . . to be confronted simply by a large number of unmarked trees. Appellants are pointing to trees. We are looking for blaze marks which single out particular trees. We see none. *In re Ruschig*, 54 C.C.P.A. 1551, 379 F.2d 990, 994-95, 154 U.S.P.Q. (BNA) 118, 122 (CCPA 1967).

In the absence of such blaze marks, simply describing a large genus of compounds is not sufficient to satisfy the written description requirement as to particular species or sub-genera. 93 F.3d at 1571. The court in Ruschig continued to further emphasize this point, stating:

Specific claims to single compounds require reasonably specific supporting disclosure and while we agree with the appellants, that naming is not essential, something more than the disclosure of a class of 1000, or 100, or even 48, compounds is required. Surely, given time, a chemist could name (especially with the aid of a computer) all of the half million compounds within the scope of the broadest claim, which claim is supported by the broad disclosure. This

does not constitute support for each compound when separately claimed. 54 C.C.P.A. at 1556.

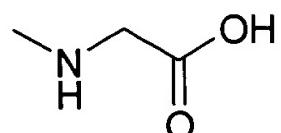
With this background in mind, the Applicant now reviews the cited reference and discusses each rejection in more detail below.

Discussion of Rejections in Light of the Case Law

The Examiner has asserted that the structures of claims 21, 25 and 27 are disclosed in Weber. On the contrary, none of the claimed structures are disclosed with sufficient specificity as required by case law.

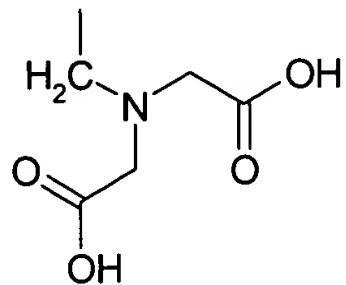
Regarding the structure shown in Claim 21, the Examiner has not illustrated the correct structure. The groups identified by the Examiner for positions Z, X1, and X2 result in a chemical compound which is structurally similar to, but distinct from that claimed. Specifically, if X2 is aryl, the disclosed compound has the aryl adjacent to the chloro group (X1). In contrast, the present invention claims a phenyl which is directly opposite (para to) the nitrogen and three carbons removed from the chloro group. These two structures are clearly not the same. It is known in the chemical arts that a difference in position of a substituent group can dramatically change the properties of a compound. Weber does not disclose the structure claimed with the phenyl group adjacent the chloro group. Merely, referring to the broad generic structure is legally insufficient to provide a basis on which to choose the Applicants claimed structure. Applicants respectfully request that the rejection of Claim 21 be withdrawn.

The Examiner has also rejected Claim 25 based on Weber. However, the Examiner has incorrectly characterized the disclosure of Weber in this regard. Specifically, the Examiner has drawn Applicants claimed structure from Claim 25 and then identified various moieties from laundry lists provided in Weber to arrive at the claimed structure. However, the X1 group of carboxymethylamino listed in Weber has a well known and recognized meaning which refers to the following structure:



In contrast, Claim 25 includes at least three significant structural differences. First, a substituent group which has an additional methylene-linking group between

the aromatic ring and the nitrogen is present. Second, the claimed structure has an additional carboxymethyl group. Third, the Weber substituent group is a secondary amine, while the claimed structure includes a tertiary amine. Each of these differences clearly distinguishes the claimed structure from the carboxymethylamino disclosed in Weber. The relevant group of claim 24 is shown as follows for comparison purposes:



Thus, even if one inappropriately assembles various groups using the generic structure and laundry lists provided, the claimed structure is still not disclosed in Weber. Since Weber does not disclose the structure claimed in Claim 25, Applicant respectfully requests that this rejection be withdrawn.

Regardless of whether someone *could* somehow pick and choose from among the listed moieties to arrive at the claimed invention, such a selection process is not an acceptable application of the law regarding anticipation. This type of process has been clearly rejected by the courts. Therefore, it is inappropriate to select such combinations without more specific guidance from the reference to choose those particular combinations. In other words, picking and choosing of moieties after first viewing Applicant's disclosure and claims is impermissible in the absence of specific directions or suggestions to do so.

It is important to note that the lists provided in Weber cover literally tens of thousands of possible compounds. For example, the disclosed list conservatively covers over 23,000 possible combinations of groups Z, X1, and X2. As mentioned above, the CCPA stated that a forest of "even 48" trees may not be fully supported as to each species. Surely, exploration of over 23,000 possibilities would be considered "undue experimentation." Even with Weber in hand, the skilled artisan would be required to test all of the possible permutations to determine that the dyes recited are valuable, let alone functional. Accordingly, the claimed compounds were not "in the possession of the public," as required by established case law. As in Ruschig, the Examiner has merely pointed to specific trees without even a remote semblance of a

blaze mark, which would lead one skilled in the art to choose the specific combination of substituent groups identified by the Examiner with respect to Claims 21, 25, and 27.

Based on the established case law discussed above, the large “laundry lists” of Weber cannot serve to enable each and every possible species which might be assembled from the given substituents listed. Therefore, as a non-enabling reference, Weber cannot be used to sustain a rejection under 35 U.S.C. §102 per MPEP §2121.01. Therefore, Applicants respectfully request that the rejection of claims 21-22 and 25-27 be withdrawn.

CONCLUSION

In view of the foregoing, Applicants believe that claims 21-22 and 25-27 present allowable subject matter and allowance is respectfully requested. If any impediment to the allowance of these claims remains after consideration of the above remarks, and such impediment could be addressed during a telephone interview, the Examiner is invited to telephone Bradley Haymond of Hewlett-Packard at (541) 715-0159, so that such issues may be resolved as expeditiously as possible.

Please charge any additional fees except for Issue Fee or credit any overpayment to Deposit Account No. 08-2025.

Dated this 30th day of March, 2004.

Respectfully submitted,

M. Wayne Western
M. Wayne Western
Attorney for Applicant
Registration No. 22,788

Gary P. Oakeson
Gary P. Oakeson
Attorney for Applicant
Registration No. 44,266

Of:

THORPE NORTH & WESTERN
P.O. Box 1219
Sandy, Utah 84091-1219
(801) 566-6633

On behalf of:

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, Colorado 80528-9599
(541) 715-0159